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ABSTRACT

Increasing attention is being paid to linking education and the market place to prepare youth for a productive role in work. Three areas constitute the ingredients for developing a realistic strategy: (1) Changes in the market place, (2) a delivery system for increased youth employment, and (3) local industry-education councils. Over the next decade significant changes will have impact on the employment situation for youth and will require major adjustments in the educational programs focusing on school-to-work transition. Some of these trends are technological changes, occupational changes from goods to services, new market areas primarily in the South and Southwest, a rise in educational requirements, higher incomes, declining birthrate, and more women and blacks in the work force. A delivery system for youth employment should focus on school-to-work transition, with industry and education collaborating on the following: Statement of goals, staff development programs in career education, school building coordinators in career education, curriculum restructuring to reflect career education concepts, career information/resource centers, job placement services (including needs assessment, job development, student development, placement, and followup), school building-employer partnerships, and task forces of volunteer career consultants. Industry-education councils can link the market place and the delivery system on the local level as representatives of business, education, labor, government, agriculture, and the professions work together on coordination of school industry cooperative efforts. (LMS)

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INDUSTRY-EDUCATION COLLABORATIVE EFFORTS IN YOUTH EMPLOYMENT

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Increasing attention is being focused on linking education and the marketplace to prepare youth for a productive role in work. It is astonishing that the effort to equip young people to find jobs should have been neglected to a significant degree until the beginning of this decade. The national career education and industry-education cooperation movements are interlocking which provide a realistic base for preparing youth to move from the world of schooling to the world of work.

Career education has become a major force in providing youth with experiences while in school that relate to work and society as a whole. It is an integral part of the educational delivery system that seeks to prepare "every student to leave the school system with at least entry-level job skills or with the basic educational attainment to permit entry into further education programs."[1] Industry-education cooperation represented by community based advisory councils is providing the linkage required for an effective school-to-work transition.

The National Association for Industry-Education Cooperation (NAIEC) cites the need for collaborative efforts between employers and educational institutions in preparing youth for work in its Handbook: An Introduction to Industry-Education Councils:

> It has always been difficult for students to make the transition from the classroom to the world of work. Students need realistic perceptions of the world of work, good quality, up-to-date educational programs to facilitate their entrance into that world. The ultimate success of schools depends upon their ability to provide these opportunities. The availability of such learning experiences can be increased by recognizing that work and education are so interrelated that neither can exist in isolation from the other.[2]

There is ample data to describe the negative side of equipping young people in the age groups of 16 through 21 for work--the high rate of youth unemployment. We are confronted with the situation at this time of one and one-half million young people in this age bracket who are in the labor market seeking employment but unable to find jobs. "Many simply flounder around from job-to-job, until they finally find themselves in a more or less permanent attachment to a job--rarely from choice; more often as a function of age and force of circumstances."[3] The problem is intensified during periods of recession as in 1975 and high unemployment. The 1976 high school graduates in record numbers continue to search for work. College graduates, in many instances, are applying for any job they can find regardless of their status as a degree holder or the principal course of study they pursued.

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It seems more appropriate at this point to depart from a further elaboration of statistics on youth unemployment and consider three areas that constitute the ingredients for developing a realistic strategy for preparing youth for work:

* changes in the marketplace affecting youth employment
* a suggested delivery system that focuses on school-to-work transition
* industry-education cooperation that links the marketplace with the schools

The emphasis throughout the analysis is on the interface between the private sector primarily and education, considering the fact that five out of six jobs are in profit-oriented organizations today.

THE CHANGING CONTOURS OF THE MARKETPLACE

Change is the hallmark of today, and the marketplace is no exception. Over the next decade, we can anticipate significant changes impacting on the employment situation for youth that will require major adjustments in the educational programs focusing on school-to-work transition.

1. Technological Changes - The efficiency of our market economy is measured by productivity, the relation of output to one or more of the inputs--labor, capital, and materials resources. "Trends over the past 25 years have reflected an annual productivity rate of 3.2 percent for the total private economy."[4] Technological advances during this period have, to a large extent, resulted in a 100% increase in productivity - a doubling of the output per hour of goods and services. Technology is the basis of increased productivity and it was in agriculture, for example, that technological changes increased productivity to the point where there has been a loss of jobs in this sector at a annual rate of 200,000 during the past two decades. Other occupations have undergone significant changes due to technological advances--how does an educational delivery system respond?

2. Occupational Changes From Goods to Services - Shortly after the turn of the century, only three in every ten workers in the nation were engaged in service industries and seven out of ten were involved in the production of goods. By 1950, there was an approximate balance in employment between goods and services. By 1968, the proportions had shifted so that six out of ten were employed in the service sector. "By 1980, with the rising predominance of services, close to seven in every ten workers will be in the service industries."[5] The youth entering the labor force during the next decade will be confronted with a situation that represents the exact reversal of the proportions between the sectors in 1900. There has been a shift to services and we are witnessing the rise of the public sector as a major area of employment.

Altogether, the goods-producing industries (agriculture, mining, construction, manufacturing) employed 29 million workers in 1968, and the number is expected to rise to 31.6 million by 1980. Yet their share in total employment will decline to below 32 percent in 1980, from about 36 percent in 1968. Within the service-producing sector, the most important growth area in employment since the end of World War II has been government (local, state, and federal). One out of every six workers today is employed by one of 80,000 plus governmental entities. All categories of the service-producing industries (transportation and utilities, trade, finance, insurance, and real estate, services--professional, personal, business, and government, have increased their share in total employment over the past three decades. What is apparent is that if an industrial society is defined in terms of a goods-producing society--if manufacturing is a key factor in shaping the character of its labor force--then this nation can no longer be considered an industrial society.

The changes in the patterns of occupations--the kind of work people do--is significant. This nation has become a white-collar society. Since 1920, the white-collar group has been the fastest growing occupational group in the labor force, and this trend will continue. We witnessed a turning point in 1956--for the first time, this group exceeded the employment of blue-collar workers. At the end of this decade, the ratio is expected to be about 5:3 in favor of the white-collar workers.

Skill requirements are increasing. In 1900, unskilled workers outnumbered managers and professionals; there were more household servants than professional workers; and one of every three blue-collar laborers lacked a skill. "Today, there are five managers and professionals for every unskilled worker; there are ten professionals for every household servant; and craftsmen and semi-skilled workers make up seven-eights of the blue-collar work force."[6] In view of these developments, how will our schools respond in preparing youth for work?

3. Geographic Changes - Economically, the United States is a vast common market consisting of disparate areas that are growing at vastly different rates. "As new markets spring up, the region begins to attract a broad array of industries--from manufacturing to all of its financial, advertising, wholesaling, printing, and other support services."[7] The "new market" areas are primarily in the South and Southwest where employment opportunities are growing at a significant rate as industry takes advantage of good climate and cheap land, and the availability of skills, materials and space.

The mobility of business is demonstrated by one out of six jobs today being located in three states--California, Texas, and Florida. These states generate one out of five gross national product dollars and along with the five Rocky Mountain States, have doubled their employment since World War II. During the next decade, it will be difficult to determine where the geographic ball will bounce. The industrial Northeast and Midwest growth rates in employment, population, and personal income are rapidly slipping--they are areas losing momentum. The migration of industry from the high-cost urbanized North to the low-cost rural South confronts schools with the necessity of preparing youth for employment in a very mobile market. It also raises the point of the delivery system developing programs that provide youth with skills that are needed by industry when it considers a site for its operation.

4. Educational Changes - The educational preparation of young people has undergone a major transformation over the past half century--"the proportion of employed people with a completed secondary education has changed from a minority to a substantial majority."[8] Consider the following data: In 1920, approximately one in six of the relevant age group graduated from high school. In 1970 the figure was about four out of five. The past half century has witnessed a dramatic change in the educational level of American workers. Instead of terminating formal education after elementary school, the predominant number of young people now entering the labor force have at least a high school diploma, and about half of all high school graduates are continuing with post secondary education with one out of five obtaining at least a college degree.

The extra investment in increased education has given rise to increased expectations which have not been met in practice. As a result, for many workers, education has not been the route to productive job opportunities. The median number of school years completed in the U.S. in 1974 was 12.5. With the educational level increasing, a number of workers feel that their skills are underutilized on the job, and this is particularly evident among younger workers who have some college background.

At the same time, "educational requirements will continue to rise steadily even for clerical and blue-collar workers."[9] Further, the match between college graduates and job openings is not encouraging in the short or long term. Between 1980 and 1985, college graduates will exceed demand by about 10%. By 1985, less than 20% of all jobs will require a four year college degree. What adjustments in the total school program will be required to meet these changes?

5. Income Changes - During the past 15 years, income has advanced at a good clip. Between 1960-74, the median family income rose 35% after cost of living adjustments. With the standard of living steadily rising in the nation, there has been an increase in the demand for products and to a much greater degree, services. The marketplace has now taken on the characteristics of an income service demand economy with a growth of jobs primarily in the service sector. Here again the educational system must respond to this major employment development.

6. Population Changes - Women's liberation, the pill, and increased female participation in the labor force came together in recent years accounting for a sharp reduction in births. The elementary schools have felt the initial impact of this development. A declining birth rate will have a ripple effect that is expected to be felt in the high schools in 1977, according to the U.S. Office of Education. The drop-off in the birth rate will have an effect on colleges and universities by the early 1980's, but the changes in post-secondary enrollments are speculative, since only about 30% of 18 to 24 year-olds are presently enrolled in school and older people tend increasingly to enter or return to college.

Declining enrollments inevitably reduce the demand for teachers despite modest changes in student teacher ratios that help to offset some of the decrease. Continued swings of considerable magnitude in the size of elementary, high school, and college populations are in prospect during the remainder of the century. Therefore, operating at a low level of births raises the issue of "quality" rather than "quantity" in American education.

7. Manpower Changes - By 1980, there will be 100 million people available for work. A significant number represent the post-war baby crop. Even though the American economy enjoyed a long period of rapid expansion in the 1960's, reinforced by additional needs for manpower by the armed forces, the large increase in the number of teenagers and young people raised the question as to whether or not the economy can sustain sufficient growth into the 1980's to provide jobs for the available workers. In addition to the quantity aspect of the manpower situation, there is the factor of composition of the labor force that bears analysis.

Women now constitute almost 40 percent of the total work force. By 1980, it is expected that one out of two workers will be female. The impact will be most noticeable in the services sector where female participation has been traditionally centered. Two out of three women who work are married and women with pre-teenage children are entering the labor force at a significant rate. Women have always worked for economic reasons, but now, superimposed on the economic motive, is the formidable psychological factor of self-realization. The impact is changing work values almost as much as the nature of the family.

Blacks constitute another major part of the changing labor force. Since World War II, there has been a marked and relative improvement in the employment, income, and education of blacks relative to whites due to a number of factors: a widespread public concern to reduce and remove long-established discriminatory practices, the more favorable geographic distribution of the black population, and the lack of any competing labor source. Yet, the lower level of family income and the small proportion going on to higher education, for example, constitute disadvantages that continue to affect many blacks. By 1980, one out of seven workers will be black. Along with women, blacks constitute a significant element in the labor force.

These, then, are the major changes that form a critical mass during the next decade. It follows that efforts to develop an educational delivery system to improve the transition from school-to-work must take into account each of these factors.

DEVELOPING A DELIVERY SYSTEM FOR YOUTH EMPLOYMENT

Youth employment viewed within the context of these major changes in the marketplace requires a strong industry-education partnership/alliance at the local level. Before suggesting an educational program that meets the needs of young people preparing to enter the world of work, it is appropriate to examine the employers' attitudes toward youth employment.

At the outset "it will come as no surprise that most business executives believe our educational system should give greater emphasis to preparation for work."[10] Most employers endorse the increased emphasis on career education and marketable skills by our elementary, secondary, and post-secondary schools. However, many employers are dissatisfied with the present performance of the schools and colleges in preparing youth for employment. It should be noted that employers express a major concern in the area of general work competencies, not about specific technical skills and professional knowledge in assessing educational institutions' performance in work preparation. Employers refer to language skills - English, communication skills, reading, writing, etc. and mathematical or computational skills as competencies that are too often found deficient in the new employee.

Entry-level blue-collar workers may be functionally illiterate and clerical workers may find difficulty in spelling or punctuating at an acceptable level, and speak or write ungrammatically. Industry also cites deficiencies in non-skills aspects of work readiness, or understanding the "work place realities." These range from faulty attitudes toward work, discipline, and accomplishment to ignorance about

beginning rates of pay, speed of advancement, and standards of behavior. Other deficiencies noted by industry are in interpersonal skills and various intellectual and conceptual abilities, such as analytical skills, the ability to plan, organize, or make decisions.

These are the employment needs of youth that industry considers priority in developing cooperative programs with schools. It is career education that "gives the business community a unique opportunity to work into the school program the kinds of skills it would like to see potential employees acquire before they begin work. Business and professional people have invaluable on-the-job expertise that no education-oriented teacher can ever impart--share that knowledge with students."[11]

Before an effective industry-education linkage is formed, the local school district must be committed to a comprehensive career education program to include job placement services. This is the recommended delivery system for youth employment, a career education program which utilizes a broad base of community resources mobilized by an Industry-Education Council. The focus for the educational program is on outcomes rather than the process of education. "It is only recently that attention has begun to be given to the outcomes of the educational process and their alignment with occupational entry requirements."[12] The emphasis on outcomes gives belated recognition that many students will eventually enter the world of work.

The following are areas in which industry-education collaborative efforts are required in preparing youth for employment:

1. Statement of Goals - One cannot expect commitment to an education to work program without a written statement of outcomes--the competencies required by students to assume a productive role in the marketplace. School staff and faculty should develop learner outcomes in cooperation with industry represented by business, labor, government, agriculture, and the professions and parent groups for a Board of Education's approval.

2. Staff Development - The major effort in the entire education-to-work program should be an intensive and sustained comprehensive training effort involving faculty, administrators, guidance counselors, and librarians representing all levels in a school program. A staff development program in career education would focus on the major phases of career development (career awareness, career exploration, career selection) and cut across all curricula. Self assessment, infusing career education concepts into the regular curriculum, career clusters, learner outcomes, occupational information of the job placement function and utilization of community resources are some of the major outcomes with respect to the program.

While career days, field trips, and community resource people are useful and necessary activities, staff development in career education with its multiplier effect and emphasis on a consortium of effort within a school building, is the key to developing an effective youth employment program. Industry, particularly the private sector, should play a direct role in the design of the program, hosting some of the conferences i.e. providing both instructional personnel and facilities, and assisting in the evaluation of the training. The end result of the staff development program would be career education implementation teams composed of staff and faculty providing the leadership in each school for a school-to-work program.

3. School Building Coordinators in Career Education - Representatives from each school building in a system who have completed staff development training in career education broaden the base of education and work programs for their clientele. Representatives from industry and post secondary educational institutions would conduct regularly scheduled workshops for coordinators for the purpose of developing additional strategies, methods, and materials for expanding the career education implementation process within a school building.

4. Curriculum - In restructuring the curriculum to reflect career education concepts, attention should be given to the high school curriculum in particular in terms of focusing the school's instruction program on the development of transferable skills through all the subjects/courses and the certification of these skills at graduation. In view of the mobility of the labor force, the educational program should consider "skills, abilities, and competencies that individuals in various occupational areas could bring to (transfer to) other jobs."[13]

5. Career Information/Resource Center - At the secondary school level, the Center would be an extension of career guidance. Counselors working with other members of a career education implementation team and the school building career education coordinator can provide direct services to students in terms of career exploration/internships (work experience) in industry projects, self assessment, occupational information, and employability skills. The Center also can serve as a curriculum and materials facility for the entire school staff.

6. Job Placement Services - This activity is the capstone of a comprehensive career education program. Job placement is the major linkage between education and work for youth who are graduating, early school leavers, physically and mentally handicapped, and post graduates.

There are five suggested functional components of a job placement services program:

* Needs assessment - the operational decisions made by schools: who to serve and what services should be provided.
* Job development - the recruitment of community business and industry support, and the promotion of job opportunities for students.
* Student development - the most complex and important segment of placement. It relates to the regular school curricula and includes special programs and activities to prepare students for entry into employment. Employability skills focusing on making a personal inventory, identifying sources on job opportunities and training programs, preparing a resume, completing application forms, being effective in a job interview, and factors to be considered before accepting a job. Survival skills should also be an integral part of this job placement activity e.g. job-behavior, interpersonal relations and decision-making skills along with those skills that are associated with self awareness. Other factors in employment such as social security, retirement benefits, taxes and using bank services would be included under student development. Personnel representatives from industry can conduct a series of classroom sessions on job-seeking and job-survival skills with student groups. The Career Information/Resource Center is a logical mechanism to coordinate this activity with faculty.
* Placement - the culminating activity of a placement program focusing on the school system's attempt to provide job matching services.
* Follow-up - is a "feedback" or the evaluative part of placement.

Operationally, a school-based job placement services program should be a team effort with a job placement coordinator at the district level directly responsible for developing placement services as an integral component of a comprehensive career education program. Career education implementation teams, school building coordinators, a job placement advisory committee, career information/resource centers, and an Industry-Education Council represent the consortium of effort required to implement a job placement function for youth. This delivery system is flexible enough to not only meet the needs of particular groups of students but also each individual as well.

7. School Building-Employer Partnerships - This project involves the development of a working relationship between a school and an area employing institution. A career education implementation team and an employer team would develop collaborative efforts in such areas as career awareness/exploration activities, tutoring

in language and mathematical/computational skills, employability and job survival skills, student internships and exchange programs involving the school and employer staffs. This industry-education cooperative activity is particularly productive in districts where the steps in developing a comprehensive career education model previously described have taken place.

8. Task Force of Volunteer Career Consultants - Preparing youth for work requires utilization of community resources within the 15 U.S. Office of Education's career cluster system. A task force of community volunteers organized by career clusters has wide application in classroom, job placement, and career exploration activities. It constitutes a major resource base in implementing an education and work program.

The design of this educational delivery system takes into account a series of linkages in developing a comprehensive program for youth employment: education-to-education, education-to-occupation, occupation-to-education and occupation-to-occupation. "The central concept is that the proper relation between education exit requirements and occupation entry requirements must be established if students are to make a smooth transition from school-to-work."[14]

INDUSTRY-EDUCATION COUNCILS: LINKING THE MARKETPLACE AND THE DELIVERY SYSTEM

A realistic catalyst for local initiatives in the program areas cited previously is the Industry-Education Council. The Council provides the vehicle for industry and education to work together at the critical interchanges between education and work. "The many benefits which stem from industry-education cooperation with local schools, students, teachers, employers and communities have been discussed and praised in journals and reports from both industry and education, yet much of this cooperative effort has been fragmentary and on an ad hoc basis."[15]

Further, collaborative efforts in youth employment are characterized by constraints within both sectors. "The educational institution is heavily bureaucratized, bound to the methodology of the past and slow to adjust to emerging needs, while the business institution has not fully recognized its stake in educational processes, nor the many ways in which it could strengthen them."[16]

Although, in most cases, these are distinct domains, the Industry-Education Council provides a school district wide mechanism linking both sectors which broadens the base of support for youth employment oriented programs. The Council serves as an umbrella for coordinating industry-education cooperative efforts related to a comprehensive career education program in terms of staff and curriculum development, career guidance, job placement and occupational information. This community

based council has the capability of providing "crucially important forums for working out - in terms of specific situations - answers to some problems affecting education - experience interchange that seem to defy solution when posed in broader conceptual terms."[17]

Youth employment programs have greater opportunities for success when the top leadership of a community representing business, education, labor, government, agriculture and the professions constitute the membership of an Industry-Education Council. Organized into functional committees, these senior decision makers provide "a united or consortium approach," bringing the largest number of people together from both systems--industry and education."[18]

The Niagara Falls Area Industry-Education Council is an example of a group directly participating in the development, coordination, and evaluation of projects associated with school-to-work transition. It mobilizes the key resources of the community; develops plans for their efficient allocation; and provides opportunity to achieve program objectives related to the school district's comprehensive career education model. The Central Jersey-Industry-Education Council in Woodbridge, New Jersey, Hampden County Industry-Education-Labor Council in Springfield, Massachusetts, and the Business and Industry Council in Madison, Wisconsin are other excellent models that emphasize industry-education collaborative efforts in youth employment. The National Association for Industry-Education Cooperation, through its network of affiliated Councils, is providing leadership in developing effective linkages between schools and industry in the area of education and work.

LONG TERM PROSPECTS

The recognition of the changes in the marketplace as a baseline for planning an effective delivery system for preparing youth for productive employment and developing a comprehensive career education program utilizing the Industry-Education Council model linking the marketplace and the schools, offer the best opportunity for a realistic education-to-work program in the long term.

"It should be noted that the private sector will be called upon in coming years to help resolve America's most serious manpower problem - to reduce unemployment by a more rapid absorption of young people into productive jobs."[19] Because youth unemployment is primarily structural in nature, it is not attributable to deficient overall demand and cannot be cured by easy money, tax reductions, or more government spending. There is a mismatch between the labor skills in the economy and those possessed by young people.

The youth employment problem looks much the same as a lot of other problems. It is the type of problem that is solved by the private enterprise system without any centralized planning. The normal function of the marketplace is to bring supply and demand into balance and to preserve that balance in changing circumstances. That is as true in the market for human services as in the market for any commodity.

In sum, there is a natural linkage between education and work. Young people need jobs and industry needs human resources for their operation. While education and industry have their separate goals, both are concerned with the development and utilization of human resources, particularly with respect to the employment of youth.

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